

U.S. Application No. 09/863,487
Reply to Office Action dated January 30, 2006

PATENT
450117-03309

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-10 are pending in this application. Claims 1 and 8 are independent. No new matter has been introduced by this amendment.

II. REJECTIONS UNDER 35 U.S.C. §112

Claims 3-4 were rejected under 35 U.S.C. §112, first paragraph.

Applicant submits that claims 3-4 are in full compliance with 35 U.S.C. §112, first paragraph.

Applicant notes that the Office Action states that with regard to claims 3 and 4, the specification does not describe the recited limitations in the respective claims. Applicant respectfully traverses this rejection as on page 6, line 36 - page 11, line 5 of the specification, it clearly describes a polyphase filter with the recited allpass filter from claim 1 and separate additional limitations from claims 3 and 4.

Reconsideration and withdrawal of 35 U.S.C. § 112, first paragraph rejections are respectfully requested.

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III. REJECTIONS UNDER 35 U.S.C. §102(a)

Claims 1 and 3 were rejected under 35 U.S.C. §102(a) as allegedly anticipated by Figure 2a of the instant application.

Claim 1 recites, *inter alia*:

"A polyphase filter...

a structure of an allpass filter of order x comprising delay elements with a delay of N and at least one multiplier, wherein delay elements with a delay of N decrease a sampling rate of each of the N branch allpass filters of order $x \cdot N$,

wherein the sampling rate $fS' = fs/N$, with fs being the sampling rate of the input signal, for each of the N branch allpass filters of order $x \cdot N$, where x is an integer number and N is a decimation factor of the polyphase filter; and

wherein said polyphase filter increases a number of Intermediate Frequencies (IF) utilized in selecting the sampling rate."

(emphasis added)

Applicant submits that Figure 2a does not disclose the features of claim 1.

Specifically, Applicant submits that there is no disclosure of a polyphase filter comprising a structure of an allpass filter of order x comprising delay elements with a delay of N and at least one multiplier, wherein delay elements with a delay of N decrease a sampling rate of each of the N branch allpass filters of order $x \cdot N$, wherein the sampling rate $fS' = fs/N$, with fs being the sampling rate of the input signal, for each of the N branch allpass filters of order $x \cdot N$, where x is an integer number and N is a decimation factor of the polyphase filter; and wherein said polyphase filter increasing a number of Intermediate Frequencies (IF) utilized in selecting the sampling rate, as recited in claim 1.

Furthermore, the features of claim 1 are disclosed and built upon the contents represented in Figure 2b.

Therefore, Applicant submits that independent claim 1 is patentable.

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For reasons similar to those described above with regard to independent claim 1, independent claim 8 is also believed to be patentable.

Therefore, Applicant submits that independent claims 1 and 8 are patentable.

IV. DEPENDENT CLAIMS

The other claims in this application are each dependent from the independent claim discussed above and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

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In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicant respectfully requests early passage to issue of the present application.

Respectfully submitted,

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